

### Patent Claims

1. Procedure to improve the audio quality in a mobile radio network, with which a tone control (7) that is switched into one of the communication connection's corresponding audio paths (10), that, dependent upon the types of end device (s) or equipment being used in the connection, influences the audio quality in the audio path (10), in that the sound in the audio path is changed.
2. Procedure, according to Claim 1, is characterized by the influence of audio quality that is different in the connection direction from the caller to the called user and from the called user to the calling user.
- a* 3. Procedure, according to Claims <sup>2</sup>~~1 or 2~~, is characterized by the base station control (3), as well as the mobile switching center (5), that determines the end device type (s) (1) by query of the mobile equipment identification and assigns to the appropriate end device type corresponding pre-determined parameters, which serve to adjust the tone control.
- a* 4. Procedure, according to one of the Claims ~~1~~ 3, is characterized by the parameters that are stored for all marketable mobile radio device and equipment (1) in a data storage (6) (memory) and can be recalled when needed.
- a* 5. Procedure, according to one of the Claims ~~1~~ 4, is characterized by the fact that stored parameters of the tone control (7) of the corresponding audio path are configured based on the type of end device (1).
- a* 6. Procedure, according to one of the Claims ~~1~~ 5, is characterized by the parameters that are transferred by one of the mobile switching centers (5) or another network component supplied control signal (8) to the tone control (7).

a 7. Procedure, according to one of the Claims ~~1-6~~, is characterized by the tone control (7) that is switched into the audio path (10) in the area of the mobile switching center (5) or the base station control (3).

a 8. Procedure, according to one of the Claims ~~1-6~~, is characterized by the tone control (7) that is switched into the audio path (10) in the area of the code conversion equipment (Transcoder/Rate Adaption Unit) (4).

a 9. Procedure, according to one of the Claims ~~1-8~~, is characterized by the tone control that is adjusted dependent upon the users' individual features.

a 10. Devices or equipment to complete the procedure, according to the Claims ~~1-9~~, encompassing a tone control (7) that is switched into a communication connection's audio path.

11. Equipment, according to Claim 10, is characterized by the tone control (7) that is located in the base station control (3).

12. Equipment, according to Claim 10, is characterized by the tone control (7) that is located in the mobile switching center (5).

c 13. Equipment, according to one of the Claims ~~10-12~~<sup>10</sup>, is characterized by the tone control (7) that is part of the code conversion equipment (Transcoder/Rate Adaption Unit) (4).

a 14. Equipment, according to one of the Claims ~~10-12~~<sup>10</sup>, is characterized by the tone control (7) that is connected or switched before or after the code conversion device (Transcoder/Rate Adaption Unit) (4).

